

Application No.: 10/758,651
Amendment dated March 17, 2005
Reply to Office Action of December 17, 2004

Remarks/Arguments

Claims 1-18, 20, 22, 25, 26, and 30-47 are in the application. Claims 1, 7, 31 and 43 are in independent form. Claims 19, 21, 23, 24, and 27-29 are cancelled.

Claim rejections under 35 USC § 112

Claims 16, 17, and 30 stand rejected under 35 USC § 112 for indefiniteness. Claims 16 and 30 are amended to recite "a spring means"

Claim rejections under 35 USC § 103

Claims 1-15 and 18-29 stand rejected under 35 USC § 103(a) for obviousness over U.S. Pat. No. 6,781,125 to Tokuda et al. ("Tokuda")

The Examiner states that Tokuda teaches "using an electron beam to perform transmissive irradiation of the sample thus attached to the sample holder (column 5 line 13 – column 6, line 55.)" Applicants submit that Tokuda does not teach using transmissive irradiation, but teaches only detecting secondary particles emitted from the front side of the sample when the surface is impacted by either primary beam. Secondary particle detector 6, which is on the front side of the sample, detects secondary particle. Col. 6, lines 8-11. Tokuda teaches that to perform transmissive irradiation, such as a TEM analysis, the sample is removed from the vacuum chamber 206 and mounted into a different instrument for analysis. Col. 22, lines 13-16. An advantage of the claimed invention is that the sample can be cut from the work piece and transmissively irradiated, for example, for TEM or STEM analysis, without being removed from the low pressure chamber.

With regard to claims 2-6, amended claim 2 clarifies that the electron detector is on the side of the sample that is opposite to the surface on which the electron beam impinges. That is, the detector is positioned, as shown in FIG. 5, such that it detects electrons that have traveled through the sample.

With regard to claim 7, the Examiner states that Tokuda teaches manipulating means embodied to allow transmissive or reflective irradiation at a second position. As described above with respect to claim 1, Tokuda does not teach a position in which transmissive irradiation can occur. Tokuda teaches only a detector of secondary particles that are emitted from the same surface that the beam impinges.

With regard to claims 9-18, 20, 22, 25, 26, and 30, applicants submit that those claims are

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allowable for reasons described above with respect to their parent claims, claim 1 or claim 7.

Claims 31-43 are added to more completely claim the invention. Claims 19, 21, 23, 24, and 27-29 are cancelled, not for reasons related to patentability, but to reduce the cost for the added claims. Claims similar to 19, 21, 23, 24, and 27-29, but with different dependencies, remain in the application.

Applicants submit that all claims are now allowable and respectfully requests reconsideration and allowance of the application.

Respectfully submitted,

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